

QUESTION #13

ATTACHMENT #10

**EPA Request for Information  
Magellan Pipeline Company, L.P.  
Mile Post 110 #3-8" and #5-12" Pipeline Strikes  
Nemaha County, Nebraska**

**QUESTION 13:**

**The following is a description of the remedial actions completed at the site to date.**

Magellan and contracted personnel immediately responded to the release. Responders discerned that the unnamed tributary of Jarvis Creek had been impacted by the release and began placing containment booms on the surface water at strategic locations. On the day of the release, crews constructed two underflow dams (UDs) on the unnamed tributary. The UD constructed further downstream (designated UD #4) contained the released FPH. Over the course of the response an additional 5 UD's were constructed (see Figure 1). The UD's served as containment structures on the surface water bodies and FPH collection points. FPH were recovered by response crews using vacuum trucks, absorbent booms, and peat. Recovery and monitoring operations were conducted on the creek daily and continue to date.

On December 20, 2011 an interceptor trench was excavated across the southern end of the swale to facilitate FPH recovery and inhibit FPH from entering the unnamed tributary. The depth of the interceptor trench extended approximately 12 feet below ground surface (bgs) and fourteen 6-inch polyvinyl chloride (PVC) recovery sumps with the lower 10 feet consisting of 0.01-inch (10 slot) machine-slotted screen were installed in the trench to intersect the groundwater table. Pea gravel was used to backfill around the screened interval for the sumps from approximately 2 to 12 feet bgs. An approximate 2 feet clay cap was placed on the pea gravel to match existing grade. The locations of the interceptor trenches and sump locations are illustrated on Figure 2.

On January 6, 2012 a second interceptor trench was excavated following the discovery of FPH entering the unnamed tributary upstream of Sump 1. The interceptor trench was excavated from approximately 12 to 17 feet bgs (deeper trending west) and eleven 6-inch PVC recovery sumps with the lower 10 feet consisting of 0.01-inch (10 slot) machine-slotted screen were installed in the trench to intersect the groundwater table. Pea gravel was added in the trench to approximately 2 feet bgs and the remaining portion was backfilled with clay. Fluids have been recovered from the sumps in the interceptor trenches on a daily basis since installation and continue to date.

Recovered fluids are temporarily stored in frac tanks at the site. The fluids are then transported to the Magellan Reclamation Facility in Kansas City, Kansas for processing. To date, approximately 252 of the 2,834 bbls of FPH released have been recovered from the sumps and the unnamed tributary via vacuum trucks, absorbent booms, and peat. This does not include FPH volumes recovered via soil excavation or evaporation.

On April 12, 2012, Ms. Mary Collura of Conestoga-Rovers & Associates met with Mr. Scott McIntyre, Nebraska Department of Environmental Quality (NDEQ) Project Manager, and Mr.

David Chamber, NDEQ Petroleum Remediation Section Supervisor and hand delivered the Laser Induced Fluorescence Investigation (LIF) work plan for review and approval. The LIF investigation will be used to evaluate the areal extent of the Light Non-Aqueous Phase Liquid (LNAPL) in the subsurface to refine the LNAPL Conceptual Site Model (LCSM) based on site-specific data.

The results of the LIF investigation will be used to support the following investigative and remedial actions:

- Further refinement and presentation of the LCSM.
- Potential locations of additional recovery wells/sumps/trenches.
- Remedial design evaluation of existing recovery trenches for modification and installation of a temporary total fluids recovery treatment system.
- Potential future groundwater monitoring well network.

All of the above proposed items will be documented in deliverables to the NDEQ project manager for review and approval prior to proceeding with additional work.

The LIF field work was completed in May 2012. Results of the LIF survey are being evaluated.



# **LEGEND**

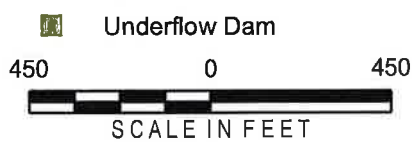
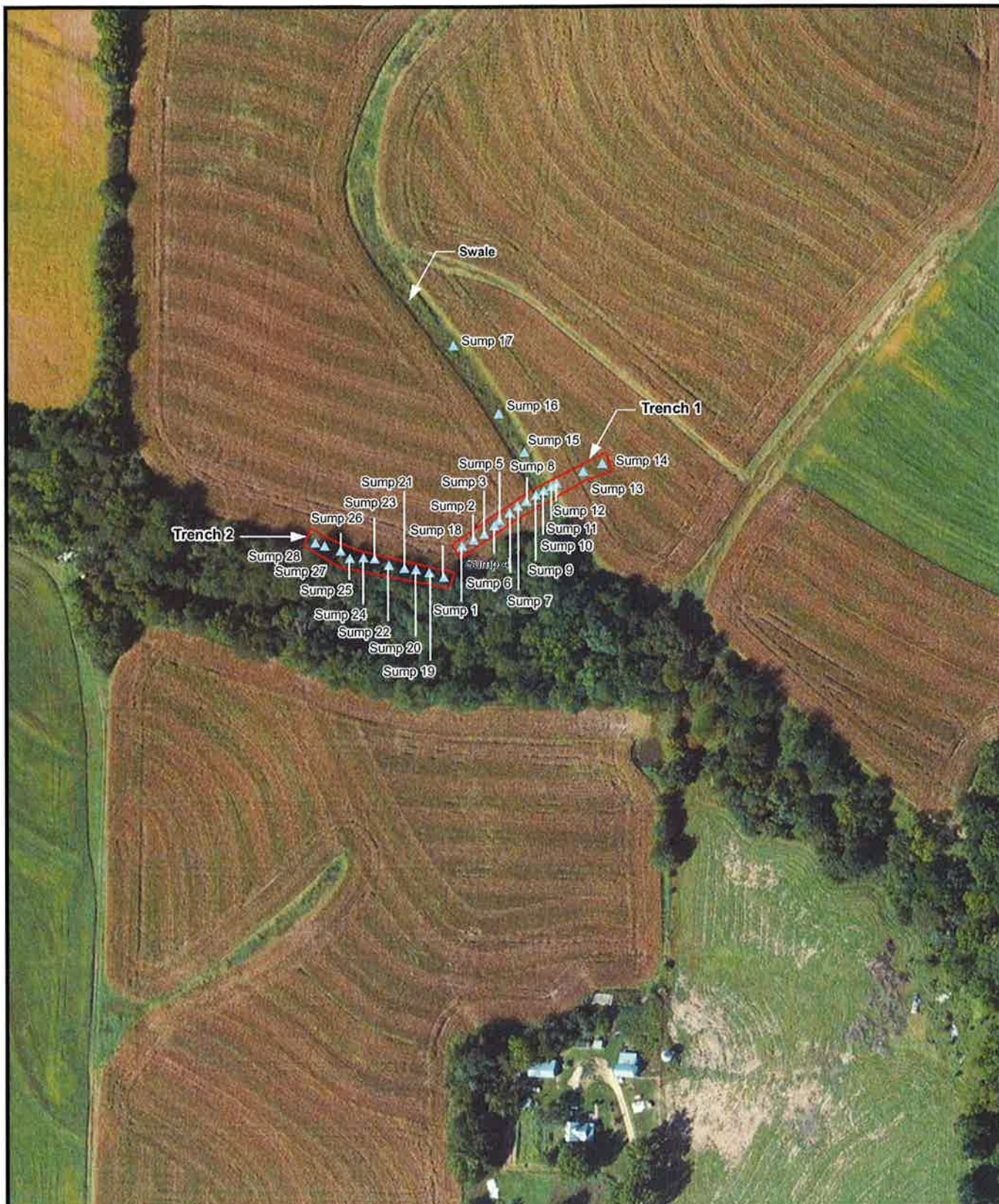


Figure 1  
Underflow Dams  
Magellan Pipeline  
Mile Post 110  
Nemaha, Nebraska



**Legend**



Recovery Sump Location

200

0

200



SCALE IN FEET



Figure 2  
INTERCEPTOR TRENCH  
SUMP LOCATIONS

Magellan Pipeline  
Mile Post 110  
Nemaha, Nebraska